WHAT IS CLAIMED IS:

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- 1. A method of manufacturing a semiconductor device, comprising:
- providing a substrate having a first electrode thereon;
- dispensing a sealing resin to a region of the substrate that does not include the first electrode;

providing a semiconductor chip having a second electrode on a peripheral portion of a front surface of the semiconductor chip;

placing the semiconductor chip over the substrate so that the front surface of the semiconductor chip faces the sealing resin;

applying a pressure to a peripheral portion of a back surface of the semiconductor chip so that the first and second electrodes come into a contact; and

applying a pressure to a central portion of the back surface of the semiconductor chip so that the sealing resin extends in a space between the substrate and the front surface of the semiconductor chip.

- 2. The method of claim 1, wherein the sealing resin comprises fillers.
- 3. The method of claim 1, wherein the first electrode or the second electrode has a20 protruding shape.
 - 4. A method of manufacturing a semiconductor device, comprising: providing a substrate having a first electrode thereon; dispensing a sealing resin to a region of the substrate that does not include the first

electrode;

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providing a semiconductor chip having a second electrode on a peripheral portion of a front surface of the semiconductor chip;

placing the semiconductor chip over the substrate so that the front surface of the semiconductor chip faces the sealing resin;

applying a negative pressure to a central portion of a back surface of the semiconductor chip and a positive pressure to a peripheral portion of the back surface of the semiconductor chip so that the first and second electrodes come into a contact; and

applying a positive pressure to the central portion of the back surface of the semiconductor chip so that the sealing resin extends in a space between the substrate and the front surface of the semiconductor chip.

- 5. The method of claim 4, wherein the sealing resin comprises fillers.
- 6. The method of claim 4, wherein the first electrode or the second electrode has a protruding shape.
 - 7. The method of claim 4, wherein the applying of the negative pressure comprises an air suction.